

REMARKS

The following remarks are prepared in response to the final Office Action mailed November 10, 2004. Claims 4-6 have been canceled without prejudice. Claims 1-3, 7-11 and 29-37 are pending in this application, after entry of this amendment.

Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by *Kneezel et al.* (U.S. Patent No. 5,881,451 hereinafter *Kneezel*). Claims 1, 2, 4-9, 24, and 26-28 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Zuber et al.* (U.S. Patent No. 6,196,651 hereinafter *Zuber*) in view of *Kneezel*. Claims 3 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Zuber* in view of *Kneezel*, as applied to claims 1, 2, 4-9, 24 and 26-28, and further in view of *Cowger* (U.S. Patent No. 6,012,508 hereinafter *Cowger*). Claims 10 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Zuber* in view of *Kneezel*, as applied to claims 1, 2, 4-9, 24 and 26-28, and further in view of *Mulay et al.* (U.S. Patent No. 6,398,333 hereinafter *Mulay*). Applicant respectfully traverses and requests reexamination.

Rejection Under 35 U.S.C. §103(a)

Independent Claim 1

Claim 1 has been amended to include some of the limitations of claim 6. Independent claim 1 has been amended to recite: “A replaceable printer component comprising a memory that stores a plurality of fusible bits representing the first resistance and pen uniqueness information that uniquely identifies an inkjet cartridge.” (Emphasis added.) The disclosure of the present application states that pen uniqueness information uniquely identifies an inkjet cartridge 12, which allows printer controller 34 to determine when a new inkjet cartridge has

been installed (paragraph 51). The Examiner rejected claim 6 as being unpatentable over *Zuber* in view of *Kneezel*.

The Examiner stated that *Zuber* teaches that the stored resistance value represents information concerning the lifetime of the print head (col. 9:35-60). That Examiner further stated that since this information is unique to the print head, this information would be print head uniqueness information. The Examiner directs Applicant to col. 9, lns. 35-60, however, these paragraphs do not disclose, teach or suggest pen uniqueness information that uniquely identifies an inkjet cartridge.

Zuber discloses the setting of a warning flag if the heat transfer efficiency is too low indicating that the print cartridge has less than a specified percentage of its life left (col. 9, lns. 44-47). More specifically, *Zuber* discloses a warning system where the user is warned when the print cartridge is either near the end of its useful life and should be replaced soon or has reached the end of its useful life and must be replaced immediately (col. 9, lns. 54-57). *Zuber* focuses on setting a flag when an old print cartridge is low. By contrast, claim 1 focuses on pen uniqueness information that uniquely identifies an inkjet cartridge. This allows the printer controller to determine when a new inkjet cartridge has been installed. Accordingly, *Zuber* fails to teach or suggest a memory that stores a plurality of fusible bits representing the first resistance and pen uniqueness information that uniquely identifies an inkjet cartridge.

Furthermore, combining *Kneezel* with *Zuber* does not teach or suggest the recitations of claim 1 because *Kneezel* does not even mention the word “memory”. Therefore, the inadequacy of *Zuber* is not satisfied by *Kneezel* because neither of these references teach or suggest a replaceable printer component comprising a memory that stores a plurality of fusible bits

representing the first resistance and pen uniqueness information that uniquely identifies an inkjet cartridge. Accordingly, the rejection of claim 1 under 35 U.S.C. §103(a) should be withdrawn.

Dependent Claims 2, 3 and 7-11

Claims 2, 3 and 7-11 depend from independent claim 1. All of these dependent claims define the replaceable printer component with greater particularity and thus further distinguish over *Zuber*, *Kneezel* and the other references of record. For this reason, and for the reasons set forth above with respect to independent claim 1, the rejection of these dependent claims should be withdrawn.

Independent Claim 29

Applicant notes that in the final office action, the Examiner failed to identify the basis for rejecting claims 29-37. Applicant believes these claims are allowable over the cited art and has provided the following arguments.

Claim 29 recites, amongst other things, “an inkjet cartridge comprising a thermal sense resistor coupled to the inkjet printhead and having an adjustable resistance that may be adjusted multiple times.” (Emphasis added.) *Zuber* discloses a temperature sensor 16 containing a thermal sense resistor and associated memory. During the manufacturing process of print cartridge 5, the value of the thermal sensor resistor is stored in the associated memory of temperature sensor 16 (*Zuber*, col. 3, ln. 58 to col. 4, ln. 2). The resistance is adjusted once at the factory. *Kneezel* discloses that “all adjustments in fractional thermistors and external resistors are made at the factory, and no special measurements or adjustments need to be made for different printheads by the user or the printer” (*Kneezel*, col. 8, lns. 29-32). In both *Kneezel* and *Zuber*, once the resistance is set once at the factory, no further adjustments to the resistance can be made. Accordingly, claim 29 should be allowable.

Dependent Claims 30-33

Claims 30-33 depend from independent claim 29. All of these dependent claims define the inkjet cartridge with greater particularity and thus further distinguish over *Kneezel*, *Zuber* and the other references of record. For this reason, and for the reasons set forth above with respect to independent claim 29, claims 30-33 should be allowable.

Independent Claim 34

Claim 34 recites, amongst other things, “a printhead comprising a thermal sense resistor having a resistance capable of being adjusted by changing one or more of the plurality of bits stored in the memory device.” In both *Kneezel* and *Zuber*, the resistance is not capable of being adjusted by changing one or more of the plurality of bits stored in the memory device. *Kneezel* discloses a fusible link shorting bar to set the resistance (*Kneezel*, col. 7, lns. 6-7). *Zuber* discloses that the thermal sense resistors are set during the manufacturing process (*Zuber*, col. 3, lns. 59-61). Hence, *Kneezel* and *Zuber* fail to teach or suggest a thermal sense resistor having a resistance capable of being adjusted by changing one or more of the plurality of bits stored in the memory device. Accordingly, claim 34 should be allowable.

Dependent Claims 35-37

Claims 35-37 depend from independent claim 34. All of these dependent claims define the printhead with greater particularity and thus further distinguish over *Kneezel*, *Zuber* and the other references of record. For this reason, and for the reasons set forth above with respect to independent claim 34, claims 35-37 should be allowable.

Conclusion

If there are any questions with regards to this prosecution, or if the Examiner believes that a telephone interview will help further the prosecution of the case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 6, 2005.

By: Rachel Carter

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Signature

Dated: January 6, 2005

Very truly yours,

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